

**300 UNDERDRAIN CROSSING:**

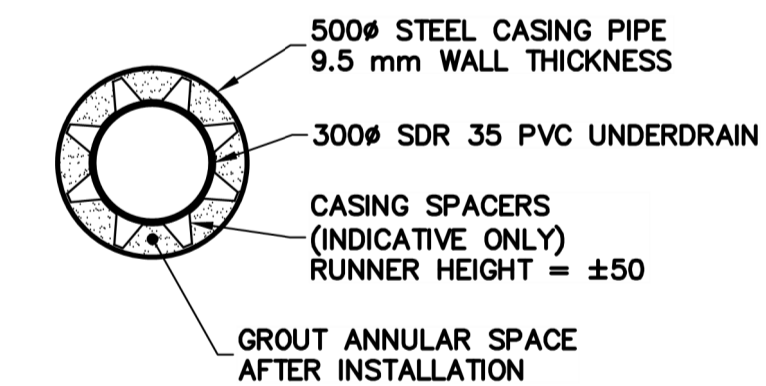
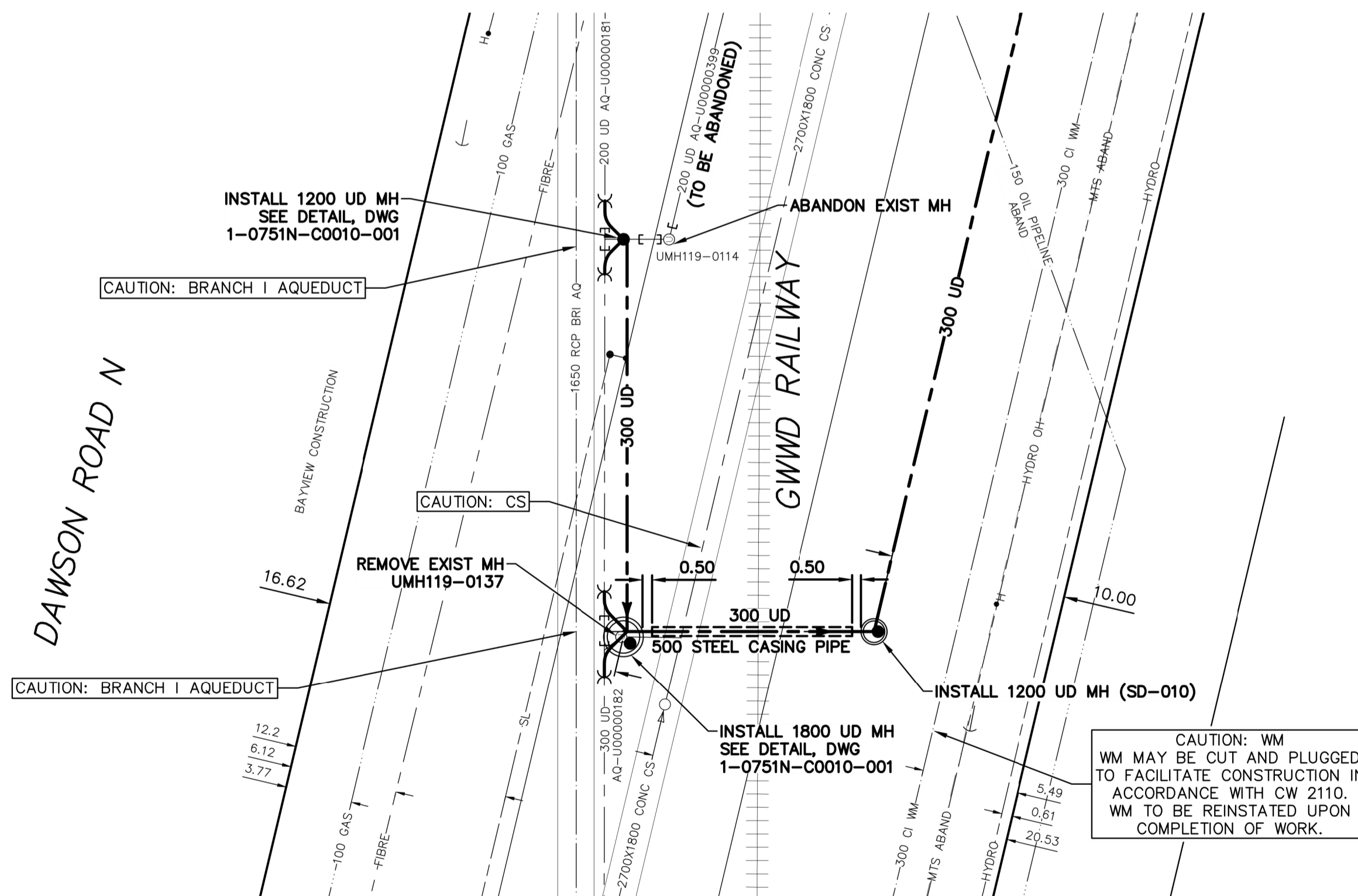
**RAIL CROSSING NOTES:**

RAILWAY MILEAGE AND SUBDIVISION	GWWD	
NAME OF PIPELINE OWNER	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT	
CONTENTS TO BE HANDLED	GROUND WATER	
MAXIMUM OPERATING PRESSURE	N/A	
MAXIMUM SURGE AND TEST PRESSURE	N/A	
MAXIMUM OPERATING TEMPERATURE	N/A	
MINIMUM OPERATING TEMPERATURE	N/A	
PIPING MATERIALS	<b>CARRIER</b>	<b>CASING</b>
NOMINAL DIAMETER	300 mm	500 mm
OUTSIDE DIAMETER	317.50 mm	508 mm
MATERIAL	PVC	WELDED STEEL
SPECIFICATION AND GRADE	ASTM D3034	MIN YIELD STRENGTH 241 MPA
WALL THICKNESS	9.07 mm	9.50 mm
TYPE OF JOINT	GASKETED BELL & SPIGOT	PERMALOK OR WELDED
COATING	N/A	N/A
METHOD OF INSTALLATION	TRENCHLESS	
VENTS	N/A	
NUMBER	N/A	
HEIGHT ABOVE GROUND	N/A	
SEALS	N/A	
BURY	BASE OF RAIL TO TOP OF CARRIER PIPE	4.00 m
TOTAL LENGTH OF NEW CASING MEASURED PERPENDICULAR TO CENTRELINE OF TRACK	11.30 m	
ANGLE OF PIPE / TRACK CROSSING	90°	
DIRECTION OF FLOW	NORTH	
TYPE, SIZE AND SPACING OF INSULATORS OR SUPPORTS	METALLIC SPACERS 50 mm RUNNER HEIGHT 3.05 m OC (MAX)	
CATHODIC PROTECTION	N/A	
GEOTECHNICAL BOREHOLES	N/A	
SOIL TYPE	CLAY	
BASE OF RAIL TO GROUND WATER	N/A	
NOTE:	INSTALLATION AND MAINTENANCE TO BE IN ACCORDANCE WITH TC E10	

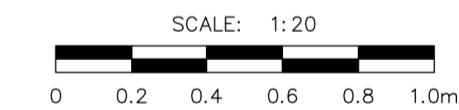
NOTE: CHAINAGES SHOWN ARE ALONG NEW 300 UNDERDRAIN PIPE

**CONSTRUCTION NOTES:**

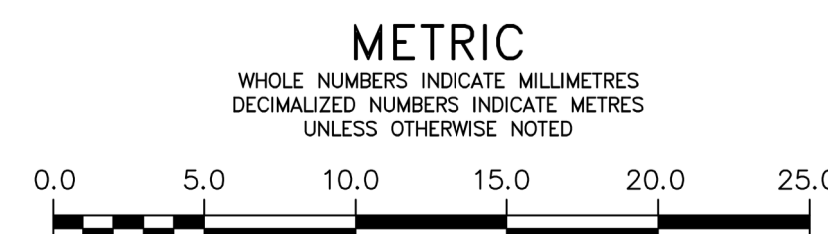
- ALL WORK NEAR GWWD RAILWAY SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATIONS.
- BED PIPE OUTSIDE OF CASING EXTENTS AS PER CW 2130 CLASS B.
- GROUT ANNULAR SPACE WITH FLOWABLE FILL AFTER INSTALLATION CONFIRMATION OF GRADES. CONTRACTOR SHALL ENSURE CASING SPACERS AND GROUTING PLAN PREVENT FLOTATION OF THE PIPE AND MAINTAIN GRADE DURING GROUTING OPERATION.



DETAIL - CASING PIPE

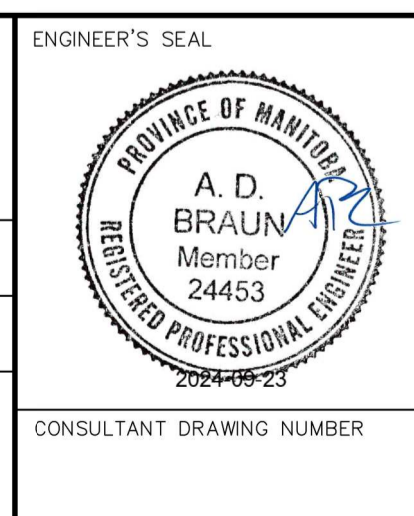


FOR INDEX SEE DWG 1-0751A-D0007-001



LOCATION APPROVED UNDERGROUND STRUCTURES		VERTICAL DATUM: CGVD28 (HT2.0 Geoid)	
SUPV. U/G STRUCTURES COMMITTEE		HORIZONTAL DATUM: NAD83 (June 1990), Zone 14	
NO.	ISSUED FOR CONSTRUCTION	DATE	2024/09/23
NO.	REVISIONS	DATE	YYYY/MM/DD

<b>Stantec</b>	
DESIGNED BY	ADB
CHECKED BY	JF
DRAWN BY	DML
APPROVED BY	ADB
SCALE:	
HORIZONTAL	1:250
VERTICAL	1:50
RELEASED FOR CONSTRUCTION	JESSICA McCOMBE, P. Eng.
DATE	SEPTEMBER 23, 2024



**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING SERVICES DIVISION

BRANCH I AQUEDUCT  
UNDERDRAIN OUTFALL REPAIRS  
**BRANCH I AQUEDUCT**  
DAWSON RD N UNDERDRAIN CROSS CONNECTION  
GWWD RAIL CROSSING

SHEET 14 OF 17  
CITY DRAWING NUMBER  
1-0751N-C0011-001